

Zamudio, Michael@DTSC

From: Zamudio, Michael@DTSC
Sent: Monday, April 06, 2015 10:41 AM
To: mike.chambless@hollister.ca.gov
Cc: Billy Avera (bill.avera@hollister.ca.gov); geri.johnson@hollister.ca.gov; Zamudio, Michael@DTSC
Subject: Notice of Deficiency for the post-closure permit renewal application, dated May 2013
Attachments: John Smith 2015 Final 1st NOD.docx; 2014-12-18 John Smith Part B Application GSU NOD tech memo.pdf; John Smith Road Landfill--Hollister ESU NOD tech memo--CE Review CEWG Findings Memo--Dec 18 2014 PG PM.pdf

Hi Mike, When we last talked, I mentioned that I would send you a Notice of Deficiency (NOD) for the post-closure permit renewal application. This NOD is in response to the post-closure permit renewal application (application) submitted to the Department of Toxic Substances Control (DTSC) for John Smith Road Landfill Class 1 (John Smith) Facility, 2650 John Smith Road, Hollister, California. The application was prepared by San Benito County and is dated May 6, 2013. This NOD consists of four parts: this email, a check list set of comments, and two memorandums submitted by DTSC's Geological Service Unit (GSU) and Engineering Services Unit (ESU). The check list set of comments is based on the post-closure application checklist included in the DTSC's Instructions for Preparing a Post-Closure Permit application, revised January 2002.

The memorandum from GSU focuses on your groundwater monitoring requirements, and the memorandum from ESU focuses on the Closure Cost Estimate. The revised application should include pertinent elements of the first draft post-closure permit application and modifications identified in check list, GSU and ESU memorandums. The final Post-Closure permit for John Smith will approve both Parts A and B of the post-closure permit application as modified during the application review period. Please revise the application according to all comments in this NOD. Please submit two hard copies and two CD electronic copies of the revised application within 30 days from the date of this email.

If you have any questions, please contact me at (916) 255-6535 or michael.zamudio@dtsc.ca.gov.

Thank you, Michael Zamudio, P.E.
Hazardous Substances Engineer
Office of Permitting

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

General Information

A1 Part A

REQUIREMENT: All applicants must provide the information listed in Title 22 CCR, Section 66270.13 using the Part A application form EPA 8700-23.

Reference: 66270.13

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: The submitted Part A form for the regulated units has not been completely filled out. Please submit a Part A form to reflect the following:

1. #10, A item 9 left blank should be marked "No", #10, B item 2 left blank should be marked "No", #10, C item 2, 3 and 4 left blank should be marked "No" and
2. The two waste management units of class 1 area. Please submit photographs showing clearly all the existing structures, treatment units listed in the Part A form.
3. Part A page 4 of 4 must be resigned by new Project Manager and new City Manager; also Certification in Appendix A at the end Part A section, Appendix A must be resigned by new Project Manager and new City Manager.

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General Information

A2 Part B Certification

REQUIREMENT: Applications must be accompanied by a certification statement as specified in Title 22 CCR, Section 66270.11(d).

Reference: 66270.11(d)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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General Information

A3 General Description

REQUIREMENT: Brief description of the facility, including the nature of the business and facility
Contacts

Reference: 66270.14 (b)(1) and (b)(13), 66264.118(b)(3)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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General Information

A4 Post-closure Notices

REQUIREMENT: Documentation that notices required under Title 22 CCR Section 66264.119
have been filed

Reference: 66264.119

- ☒ The information submitted satisfies the requirements of this checklist subsection.
- ☐ The information submitted does not satisfy the requirements of this checklist subsection.
- ☐ Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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General Information

A5 Other Federal Laws

REQUIREMENT: Compliance with the requirements of applicable federal laws such as the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and the Fish and Wildlife Coordination Act

Reference: 66270.3

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Facility Description

B1 Facility Location

REQUIREMENT: Narrative description of items included on the topographical map identified in Section B-2, including a detailed description of the facility location with an area wide map showing roads and surrounding adjacent properties. Also include an identification of the local jurisdiction(s) in which the facility is located.

Reference: 66270.14 (b)(11)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Facility Description

B2 Topographical Maps

- REQUIREMENT: (a) Topographic map(s) which shows the facility and a distance of 2,000 feet around it, at a scale of 1 inch equal to not more than 200 feet:
- (1) Contours sufficient to show surface water flow around the facility operations
 - (2) Map scale and date
 - (3) 100-year floodplain area
 - (4) Surface waters including intermittent streams
 - (5) Surrounding land uses
 - (6) A wind rose
 - (7) Map orientation
 - (8) Legal boundaries of the hazardous waste management facility site
- (b) Location of the following:
- (1) Access controls
 - (2) Access and internal roads
 - (3) Injection and withdrawal wells (onsite and offsite)
 - (4) Buildings and structures
 - (5) Sewers
 - (6) Flood control or drainage barriers
 - (7) Run-on and run-off control systems
 - (8) Existing hazardous waste management units and solid waste management units
 - (9) The waste management area boundaries
 - (10) The point(s) of compliance
 - (11) Groundwater monitoring well locations

Reference: 66270.14 (b)(18), 66270.14(c)(3)

The information submitted satisfies the requirements of this checklist subsection.

- ☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: Appendix B, page 6 the gravel thickness should read one foot not two feet.

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Facility Description

B3 Floodplain

REQUIREMENT: Floodplain requirements

Reference: 66264.18 (b), 66270.14(b)(11)

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: Appendix B, the table of contents has the page number incorrect for, "Estimate for 100-Year Flood". Also, see GSU memo comments on floodplain requirements.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Closure/Post-closure

C1 Closure / Post-closure Plan

REQUIREMENT: Copy of the approved closure plan, closure report and certification, and post-closure plan

Reference: 66270.14 (b)(13)

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

1. Provide a copy of the approved Closure Plan, dated May 2, 1991 by reference is not acceptable to DTSC.
2. Appendix B, the table of contents has the page number missing and should read page 22, please include page number.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Security

D1 Security Requirements

REQUIREMENT: Adequate security and requirement details

Reference: 66264.14, 66270.14(b)(4)

- ☒ The information submitted satisfies the requirements of this checklist subsection.
- ☐ The information submitted does not satisfy the requirements of this checklist subsection.
- ☐ Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Security

D2 Emergency Preparedness

REQUIREMENT: (a) Emergency equipment
(b) Testing and maintenance of equipment
(c) Water and fire control
(d) Documentation of arrangements with emergency agencies
(e) Equipment and power failure

Reference: 66270.14(a) and (b), 66264.32(c) and (d), 66264.33 66264.37

- ☒ The information submitted satisfies the requirements of this checklist subsection.
The information submitted does not satisfy the requirements of this checklist subsection.
Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Financial Responsibility

E1 Cost Estimates

REQUIREMENT: Copy of the most recent post-closure cost estimate

Reference: 66270.14 (b)(16)

The information submitted satisfies the requirements of this checklist subsection.

- ☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: A memorandum (memo) dated December 18, 2014 attached to this Notice of Deficiency includes comments from our engineering staff on the review of your Financial Assurance Cost Estimate. Please review the memo and set-up a conference call with us to discuss the memo. The cost estimate must be adjusted annually for inflation pursuant to Title 22 CCR Section 66264. 144(b).

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Financial Responsibility

E2 Financial Responsibility Mechanisms

REQUIREMENT: Copy of the established financial assurance mechanism for post-closure care of the facility

Reference: 66270.14 (b)(16)

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: Appendix B page 24, section 2.16.2 paragraph 1 and 2 the California Code of Regulation, Title 22 citations have errors, please correct all citations with errors. Depending on the Revised Cost Estimate the financial assurance mechanism may have to be updated.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Inspection and Maintenance

F1 Closure Structures

REQUIREMENT: (a) List of wastes
(b) Liner and cap system description
(c) Liner system foundation description
(d) Leachate collection/detection system operation and design (If applicable)
(e) Run-on control system
(f) Run-off control system
(g) Cap maintenance

Reference: 66264.301, 66264.309, 66264.310, 66270.21 (a) and (b)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Inspection and Maintenance

F2 Inspection Plan

REQUIREMENT: Inspection Plan which includes the following:

- (a) Inspection schedule
- (b) Inspection description
- (c) Inspection checklist
- (d) Inspection log
- (e) Inspection remedial actions

Reference: 66264.15 (b) and (c), 66264.118(b)(2), 66270.14(b)(5)

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: Appendix B has an inspection Table 1 and inspection form Check List, but no remedial action items are noted or listed. Please provide remedial action items plans for all major items. The maintenance and inspection schedule must reflect any conditions or other recommendations by the engineer to monitor and maintain drainage cover performance.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Monitoring Requirements

G1 Groundwater Monitoring Plan

REQUIREMENT: See Appendix I Section 6.0.

- (a) Purpose of plan
- (b) Waste management history
- (c) Uppermost aquifer
- (d) Nature and extent of plume
- (e) Analytical parameters
- (f) Concentration limits
- (g) Monitoring program description
- (h) Water Quality Sampling and Analysis Plan
- (i) Statistical Evaluation Plan
- (j) Monitoring System Operation and Maintenance Plan
- (k) Summary of existing environmental monitoring data

Reference: 66270.14(c)(1), 66264.979

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: The Sacramento Geological Services Unit (GSU) of the Department of Toxic Substances Control (DTSC) has reviewed the Part B Application and provided recommendations. A memorandum dated December 18, 2014 is attached to this Notice of Deficiency and includes comments from our geology staff on the review of the Part B Application related to groundwater monitoring, including the Site-Specific Water-Quality Monitoring Plan (WQMP) and its appendices. Please revise the Part B Application to address the GSU comments. DTSC and GSU are available for a conference call and/or meeting to discuss the GSU comments.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Monitoring Requirements

G2 Surface Water Monitoring Plan

REQUIREMENT: See Appendix I, Sections 9.0, 10.0, 11.0

- (a) Purpose of plan
- (b) Waste management history
- (c) Surface water features
- (d) Nature and extent of plume
- (e) Analytical parameters
- (f) Concentration limits
- (g) Monitoring program description
- (h) Water Quality Sampling and Analysis Plan
- (i) Statistical Evaluation Plan
- (j) Monitoring System Operation and Maintenance Plan
- (k) Summary of existing environmental monitoring data

Reference: Article 6, 66264.90 - 66264.100, 66264.97(C)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Monitoring Requirements

G3 Vadose Zone Monitoring Plan

REQUIREMENT: See Appendix I, Section 8.0

- (a) Purpose of plan
- (b) Waste management history
- (c) Vadose zone description
- (d) Nature and extent of plume
- (e) Analytical parameters
- (f) Concentration limits
- (g) Monitoring program description
- (h) Vadose Zone Sampling and Analysis Plan
- (i) Statistical Evaluation Plan
- (j) Monitoring System Operation and Maintenance Plan
- (k) Summary of existing environmental monitoring data

Reference: Article 6, 66264.97(d)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: See comments on G1 Groundwater Monitoring Plan.

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Environmental Monitoring & Response Programs for Air, Soil, and Soil-Pore Gas

H Environmental Monitoring & Response Programs for Air, Soil, and Soil-Pore Gas

REQUIREMENT: Demonstrate compliance with Article 17 requirements.

Reference: Article 17, 66264.700 - 66264.708

☒ The information submitted satisfies the requirements of this checklist subsection.

☐ The information submitted does not satisfy the requirements of this checklist subsection.

☐ Not applicable

Comments:

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John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Air Emission Standards for Process Vents

I Air Emission Standards for Process Vents

REQUIREMENT: Demonstrate compliance with Article 27 (RCRA AA) requirements.

Reference: Article 27, 66264.1030 - 66264.1036

The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

☒ Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Air Emission Standards for Equipment Leaks

J Air Emission Standards for Equipment Leaks

REQUIREMENT: Demonstrate compliance with Article 28, (RCRA BB) requirements.

Reference: Article 28, 66264.1050 - 66264.1065

The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

☒ Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Air Emission Standards for Tanks, Surface Impoundments, and Containers

K Air Emission Standards for Tanks, Surface Impoundments, and Containers

REQUIREMENT: Demonstrate compliance with Article 28.5, (RCRA CC) requirements.

Reference: Article 28.5, 66264.1080 - 66264.1090

The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

☒ Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Seismic Requirements

L Seismic Requirements

REQUIREMENT: Demonstrate compliance with seismic standards.

Reference: 66270.14(b)(11)(A) 66264.18(a) 66264.25 66264.228 66264.310

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: See comments on GSU memo attached to this NOD.

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Corrective Action

M1 Location on Topographic Map

REQUIREMENT: The location of the corrective action unit(s) on the required topographic map.

Reference: 66270.14(d)(1)(A)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Corrective Action

M2 Solid Waste Management Units

REQUIREMENT: Characterization of the Solid Waste Management Unit(s):

- (a) Type of unit
- (b) Location of each existing or closed unit on the topographic map
- (c) General dimensions and structural description including engineering drawings for each unit (if available)
- (d) Dimensions and materials of construction of each unit, if available
- (e) Dates when the unit was in operation
- (f) Description of the wastes placed in the unit
- (g) Quantity or volume of wastes

Reference: 66270.14(d)(1)

- ☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Corrective Action

M3 Release from SWMU

REQUIREMENT: Provide all information available, including releases reported under CERCLA, on whether or not any releases have occurred from any of the solid waste management units at the facility.

(a) Information on releases must include the following concerning prior or current releases:

- (1) Date of the release
 - (2) Type of waste or constituent released
 - (3) Quantity or volume released
 - (4) Nature of the release
 - (5) Monitoring and other analytical data available to describe the nature and extent of the release
- (b) If no releases, describe the methodology used to determine that releases from solid waste management units are not present.

Reference: 66270.14(d)(1) and (2)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

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Corrective Action

M4 Public Exposure

REQUIREMENT: Provide information on the potential for the public to be exposed to releases.

At a minimum, this must include:

- (a) Reasonably foreseeable potential releases
- (b) Potential pathways of human exposure
- (c) Potential magnitude and nature of exposure

Reference: 66270.10(j)

- ☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Corrective Action

M5 Corrective Action Program

REQUIREMENT: (1) Characterization of contamination
(2) Concentration limits
(3) Corrective Action Plan
(4) Monitoring program(s)
(5) Background values
(6) Sampling, analysis and statistical procedures

Reference: 66270.14 (c)(8)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Potential Redevelopment Information

N Potential Redevelopment Information

REQUIREMENT: Any information or applicable discussion related to the proposed or potential future redevelopment of the site

Reference: 66270.14(b)(19)

☒ The information submitted satisfies the requirements of this checklist subsection.

The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments:

Notice of Deficiency

John Smith Road Landfill Class 1, Post-closure Permit Renewal Application

April 2015

Additional Information

O Additional Information

REQUIREMENT: Any additional information related to the proposed activity or facility which is requested by DTSC

Reference: 66270.14(b)(19)

The information submitted satisfies the requirements of this checklist subsection.

☒ The information submitted does not satisfy the requirements of this checklist subsection.

Not applicable

Comments: Please include the 2013 WDR in the revised application since you included the 2010 WDR. DTSC recommends that you please provide the information which addresses all other comments prepared by DTSC's GSU memo.

Appendix J, Emergency Response Plan/Contingency Plan: Please revised application for Emergency Coordinator and Project Manager since you submitted a Class 1 Permit Modification.



Matthew Rodriguez
Secretary for
Environmental Protection



Department of Toxic Substances Control

Barbara A. Lee, Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Edmund G. Brown Jr.
Governor

MEMORANDUM

TO: Michael Zamudio, P.E.
Hazardous Substances Engineer
Hazardous Waste Management Program

FROM: Lora Kiger Jameson, P.G. *Lora Jameson*
Engineering Geologist, Sacramento Geological Services Unit
Brownfields and Environmental Restoration Program

INTERNAL REVIEW: Dot Lofstrom, P.G. *Dot Lofstrom*
Chief, Sacramento Geological Services Unit
Brownfields and Environmental Restoration Program

DATE: December 18, 2014

SUBJECT: REVIEW OF POST CLOSURE PERMIT RENEWAL APPLICATION
CLASS I AREA, JOHN SMITH ROAD LANDFILL
HOLLISTER, SAN BENITO COUNTY
Project No. 25035/200055-33/6-HWMP WR: 20026048

DOCUMENT REVIEWED

Hazardous Waste Permit Renewal Application, Part A and Part B, John Smith Road Landfill, Class I Area, Hollister, CA. Prepared by San Benito County Integrated Waste Management Department. May 6, 2013. (Permit Application)

INTRODUCTION

The Sacramento Geological Services Unit (GSU) of the Department of Toxic Substances Control (DTSC) has reviewed the Permit Application referenced above. If you have any questions or comments regarding this memorandum, please contact Lora Jameson at (916) 255-6523 or lora.jameson@dtsc.ca.gov.

In November 2003, a Hazardous Waste Facility Postclosure Permit (2003 Permit) was issued by DTSC for the Class I Area of the John Smith Road Landfill (the site). By reference, the 2003 Permit includes the Site-Specific Water-Quality Monitoring Plan (2003 Monitoring Plan; Conor Pacific, 2003). A Sampling and Analysis Plan (2003 SAP) is included in the 2003 Monitoring Plan as Appendix B. The 2003 Permit also included by reference the Waste Discharge Requirements (WDR) and Monitoring and Reporting Program (MRP) R3-2002-0001 issued by the Central Coast Regional Water Quality Control Board (RWQCB) in 2002.

The Permit Application for renewal of the postclosure permit for the Class I Area was prepared by San Benito County Integrated Waste Management Department (the Permittee).

COMMENTS AND RECOMMENDATIONS

GSU reviewed the following sections of the Permit Application:

- Appendix B, Sections 2.5, 2.8.2, 2.11, and 3.
- Appendix H, Site-Specific Water-Quality Monitoring Plan (WQMP), prepared by Golder Associates in 2010. The WQMP includes the following appendices:
 - Appendix A - Selection of Class I Facility Constituents of Concern (COCs) and Routine Monitoring Parameters,
 - Appendix B - Sampling and Analysis Plan (SAP),
 - Appendix C - February 7, 2003 Expansion Area Monitoring Plan (revised 2010), and
 - Appendix D - Concentration Limits.

General comments

- 1) Applicable WDR and MRP. Appendix G of the Permit Application should be revised to include WDR/MRP R3-2013-0047, which was issued in late 2013 after initial submittal of the Permit Application. In addition, Appendix B (Section 2.8.2, 3.1, 3.5, and 3.6) and Appendix H of the Permit Application should be revised to reference WDR/MRP R3-2013-0047.

Instead of reviewing the MRP that was included in the Permit Application, GSU reviewed the Permit Application assuming MRP R3-2013-0047 will be referenced in the forthcoming permit.

GSU has not previously reviewed MRPs that were issued subsequent to issuance of the DTSC permit, including the 2007 revision to MRP R3-2002-0001, MRP R3-2010-0021, and MRP R3-2013-0047. In addition, GSU has not previously reviewed the 2010 WQMP that is included in the Permit Application as Appendix H.

- 2) Water level frequencies. The 2003 Permit issued by DTSC included a requirement to collect groundwater elevation measurements quarterly. The Permit Application proposes to collect groundwater elevation measurements semi-annually, in accordance with MRP R3-2013-0047.

The Permit Application does not include justification for reducing the frequency of water level measurements from quarterly to semi-annual. However, based on quarterly water level measurements that were made through 2006, groundwater levels below the Class I Area have not exhibited fluctuations in water levels that justify quarterly water level measurements. Therefore, semi-annual water level measurements are appropriate for the Class I Area. However, Appendix B (Section 3.6.1) and Appendix H (Sections 2.1.1 and 3.0) of the Permit Application should be revised to provide the justification for semi-annual water level measurements.

- 3) Groundwater sampling frequencies. The 2003 Permit issued by DTSC included collection of groundwater samples for monitoring parameters (MPs) semiannually and COC samples once every five years. However, since 2007, semi-annual sampling for MPs has not been conducted, and groundwater samples for COC analysis are scheduled to be collected once every five years, with the last COC event conducted in the second half of 2010 and the next COC event scheduled for 2015. Therefore, samples are currently collected once every five years. These changes were executed in accordance with the 2007 revision to MRP R3-2002-0001, although a DTSC permit modification was not obtained for such changes.

The Permit Application does not include justification for eliminating collection of samples semi-annually for analysis of MPs. In addition, the Permit Application does not provide justification for reducing the groundwater sampling frequency to once every five years.

Groundwater flow rates below the Class I Area ranged from 19 to 2,900 feet per year during the first half 2014 groundwater monitoring event (Golder Associates, 2014). If a release were to occur immediately following a groundwater sampling event, the contamination could migrate approximately 95 to 14,500 feet before it could be detected during the next five year sampling event. The intent of a detection monitoring program is to provide the earliest possible detection of a release from the regulated unit. The monitoring program for the Class I Area is not properly designed to detect a release within a reasonable timeframe if groundwater migrates over 14,000 feet between sampling events.

The duration between sampling events should be based on factors such as nature and conditions of the waste at the time of closure, fate and transport of the COCs in the vadose zone and groundwater, land and groundwater use downgradient of the Class I Area, effectiveness of the landfill cap at preventing infiltration into the waste, and monitoring data collected since closure. However, none of these factors are included in the Permit Application as justification for sampling once every five years.

Title 22, section 66264.97(e)(12)(B) outlines that groundwater samples should be collected quarterly, semi-annually, or at an alternate frequency approved by DTSC. The Permit Application should be revised to include sampling quarterly, semi-annually, or an alternate frequency using the above factors. These changes should apply to Appendix B (Section 3.6.2) and Appendix H (Sections 4.1 and 6.0 and Table 2) of the Permit Application.

- 4) MPs and COCs. Along with the changes in groundwater sampling frequencies discussed above, the Permit Application includes changes to MPs and COCs when compared with the 2003 Permit. These changes include elimination of MPs for Class I Area wells, and a reduction in the list of COCs. Although these changes were executed in accordance with the 2007 revision to MRP R3-2002-0001 and issuance of MRP R3-2013-0047, a DTSC permit modification was not obtained for such changes.

Title 22, section 66264.93 states that COCs are the "waste constituents, reaction products, and hazardous constituents that are reasonably expected to be in or derived from waste contained in the regulated unit." Title 22, section 66260.10 defines MPs as "physical parameters, waste constituents, reaction products, and hazardous constituents, that provide a reliable indication of a release from a regulated unit."

Appendix A of the WQMP provides the justification for COCs and MPs for the Class I Area. The previous 1996 permit and existing 2003 Permit included the compounds in Appendix A as COCs and MPs for the Class I Area. However, multiple COCs and all MPs identified in Appendix A are not included in MRP R3-2013-0047, and thus risk being excluded in the forthcoming renewed post-closure permit for the Class I Area. For example,

- Section 4.2.1 of Appendix A identifies multiple chemicals as COCs that are not included in MRP R3-2013-0047. Some of the missing chemicals and their analytical methods are listed below:
 - Organophosphates (EPA Method 8141)
 - Chlorophenoxy herbicides, including 2,4-D, 2,4-DB, and 2,4,5-T (EPA Method 8151)
 - Fungicides, parathion, methyl parathion, methiocarb, and metribuzin (methods unknown)

- Dinitro compounds (EPA Method 8270)
- Phenols (EPA Method 8270 or 8041)
- Quaternary ammonium herbicides, specifically paraquat (EPA Method 549)
- Chloride, sodium, sulfate, and nitrate (various methods)
- MPs that would provide the best indicators of a release are included in Section 4.2.2 of Appendix A as chlorophenoxy herbicides, paraquat, phenolic compounds such as 2-nitrophenol, VOCs such as 1,2-dichloropropane, arsenic, chromium, iron, manganese, chloride, nitrate, chemical oxygen demand, total dissolved solids, and electrical conductivity. However, WDR/MRP R3-2013-0047 does not include any of these chemicals or physical parameters as MPs.

The Permit Application should be revised to include COCs that are based on wastes received and byproducts of those wastes. The Permit Application should also be revised to include MPs that will provide the best indicators of a release. These changes should apply to Appendix B (Section 3.6.3) and Appendix H (Section 4.1, Table 4, and Appendix D) of the Permit Application.

Specific Comments

- 5) Appendix B, Section 2.5, Semi-Annual Inspection Program, Table 1, Inspection Schedule. The table shows the groundwater monitoring system will be inspected quarterly. However, groundwater inspections have not been conducted quarterly. If the Facility intends to conduct inspections of the groundwater monitoring systems semi-annually, the table should be revised accordingly.
- 6) Appendix B, Section 3.7, Compliance Monitoring. Because the Permit Application does not include the information necessary to implement a compliance monitoring program (otherwise known as an evaluation monitoring program), a permit modification will be necessary to change from detection monitoring to compliance (evaluation) monitoring. In the event that a release has been detected and confirmed by the groundwater detection monitoring program, an evaluation monitoring program will be required in accordance with sections 66270.14(c)(7) and 66264.99 of title 22, and a permit modification will be necessary.
- 7) Appendix B, Section 3.8, Corrective Action Program. The text states that if groundwater monitoring indicates a potential release, the steps outlined in Section 3.5 of the Post-closure Plan for the Class I Area would be followed. GSU has not reviewed this information because it was not included in the Permit Application. Similar to compliance (evaluation) monitoring above, information relevant to a corrective action monitoring program should be included in the Permit Application.
- 8) Appendix H (WQMP), Section 9.5, Retest Procedures. The second bullet on page 25 states "resampling to verify the detection will be performed within 45 calendar days from the time that the statistically [sic] evaluation indicating a release was made." Section 66264.97(e)(8)(E)(3) states resampling will be done within 30 days or within a different time frame approved by DTSC. The WQSP text should provide the justification for the longer time frame.

Minor comments

- 9) Appendix B, Sections 2.5.1, 2.5.2. These sections reference inspections after a major storm (greater than 25-year, 24-hour rainfall). For ease of the user, we recommended that the text include the amount of rain that would trigger an inspection, rather than referring only to the year-type storm. Alternatively, the text can identify the location of the information in the Permit Application.
- 10) Appendix B, Section 2.11.2, Geology and Seismicity of the Class I Area. Paragraphs 1 and 3 of this section reference Figure 2 for information regarding regional geology and geologic structures. However, we cannot find a Figure 2 in the Permit Application that includes this information. Please include the applicable figures in the Permit Application, or correct the figure references as appropriate.
- 11) Appendix H (WQMP), Section 1.6.3, Surface Water. Please update the values in the text with recent data from http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.html?bkmrk=ca. Using the location of the site, GSU reads the precipitation values to be as follows: the 2-year storm is 1.98 inches, the 10-year storm is 3.21 inches, and the 100-year storm is 5.17 inches (24-hour duration for each).
- 12) Appendix H (WQMP), Appendix C. Appendix C of the WQMP is the February 7, 2003 Expansion Area Monitoring Plan. The table of contents to the WQMP notes that the document was revised in 2010. However, the copy of the Expansion Area Monitoring Plan included with the WQMP appears to be unchanged from 2003. Please include an updated version of the Expansion Area Monitoring Plan, or revise the table of contents to reference the 2003 version, as appropriate.

REFERENCES

- Conor Pacific. 2003. *Site-Specific Water-Quality Monitoring Plan, Class I and Class III Areas, John Smith Road Landfill, San Benito County, California*. Revision 2. March 2003.
- Golder Associates. 2014. *First and Second Quarter 2014 Semi-Annual Monitoring Report, Class I and Class III Areas, John Smith Road Landfill, San Benito County, California*. July 2014.



Department of Toxic Substances Control



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FINANCIAL ASSURANCE COST ESTIMATE INITIAL FINDINGS M E M O R A N D U M

TO: Michael Zamudio, P.E.
Project Manager
Office of Permitting, Sacramento


VIA: Juan Koponen, Unit Chief
Engineering and Special Projects Office

FROM: Peter Gathungu, P.E., G.E.
Engineering and Special Projects Office

SUBJECT: REVIEW OF POST-CLOSURE COST ESTIMATE FOR CLASS I AREA
OF JOHN SMITH ROAD LANDFILL, HOLLISTER, SAN BENITO
COUNTY, CALIFORNIA (Site Code: 200055)

DATE: December 18, 2014

12/18/14



Document Reviewed

The result of this review is limited to the following documents, or sections thereof:

1. *Hazardous Waste Permit Renewal Application, Part A and Part B, Permit # CAD 990665432, John Smith Road Landfill, Class I Area, Hollister/San Benito County California, Consisting of Volumes 1 and 2, Submitted by San Benito County Integrated Waste Management.*

Cost Estimate Review

Department of Toxic Substances Control (DTSC) Cost Estimating Work Group (CEWG) engineering staff reviewed the Financial Assurance Cost Estimate (CE) for Class I area of the John Smith Road Landfill submitted as part of the RCRA Post-Closure Permit renewal to determine if the estimated dollar amount is sufficient for compliance with the financial assurance requirements established for the site. This memorandum provides the initial findings of our review.

The John Smith Road Landfill covers a total of about 95.47 acres and is located southeast of the City of Hollister, San Benito County. The Class I portion of the landfill consists of about 5.11 acres on the eastern portion and is owned by the City of Hollister. The remainder portion is owned by San Benito County of which 58 acres are designated as a Class III landfill and currently used for disposal of municipal waste. The Class I area consists of two inactive and closed hazardous waste disposal units; Impoundments 1 and 2, which received liquid waste between 1977 and 1983. Impoundment 2 was designed as an overflow from Impoundment 1. Impoundment 1 was closed by construction of a cap consisting of (bottom to top) foundation soils, two-foot thick compacted clay layer, 60-mil HDPE geomembrane, a 10 oz/yd² geotextile cushion, a two-foot thick gravel drainage layer, an 8-ounce geotextile, and a 1.5-foot thick vegetative layer. Impoundment 2 closure consists of foundation soils, clay layer, and vegetative cover. The entire perimeter of the Class I area is fenced with a 4- to 5-foot high, three-strand barbed wire with metal or wood posts and has two cattle gates. We understand that currently four groundwater detection monitoring wells (E-2, E-3, E-9 and E-17), and six additional groundwater measurement wells (E-1, 8, 12, 13, 14 and G-24) are used for monitoring groundwater in the Class I area. The first post-closure permit for the Class I area was approved on June 12, 1996. The Class I area currently is used for soil stockpiling in conjunction with construction of modules/cells for the Class III portion. We understand most of the soil stockpile will be used in constructing a soil closure cap for the Class III area in 15 to 22 years.

The Scope of Work for operations and maintenance (O&M) activities at the Class I area includes:

- Semi-annual reporting to the Regional Water Quality Control Board (RWQCB) per the Waste Discharge Requirements (WDR) and DTSC
- Groundwater level and quality monitoring
- Benchmark surveying
- Site inspection, maintenance and repair following extreme natural occurrences
- Routine site inspection, maintenance and repair of structures at the facility
- Cover and storm water management system monitoring and maintenance
- Providing a financial mechanism throughout the entire post-closure period
- Post-closure permit renewals and annual fees
- Site security (fence and signage)

Based on my review of the above listed documents, I have concluded the following:

- XX The Financial Assurance Cost Estimate does not include enough detail to determine if the proposed amount is appropriate. The deficiencies found in the Financial Assurance Cost Estimate documentation are listed below in this memorandum.
- _____ The Financial Assurance Cost Estimate does not provide a reasonable estimate of the cost for a third party to perform the Scope of Work in the event the Responsible Party will not. The deficiencies found in the Financial Assurance Cost Estimate are listed below in the memorandum.
- _____ The Financial Assurance Cost Estimate is referred to the Branch Chief for further evaluation to determine if the amount should be approved as a Settlement.

Financial Assurance Cost Estimate Deficiencies

1. Appendix I, Table 14 Class I Area 2012 Adjusted Post-Closure Cost Estimate, John Smith Road Landfill. The first six items in the table present lump sum costs. The lump sum costs in the table should be expanded to include detailed/itemized unit cost and quantity basis directly in the document or via reference/appendix.
2. Appendix I, Table 14 Class I Area 2012 Adjusted Post-Closure Cost Estimate, John Smith Road Landfill. The tabulated costs are adjusted for 2012. The table should be revised to include updated costs. In addition, the notes at the bottom of the table indicate that the costs are based on 2007 and 2008 estimates or actual costs.
3. The cost estimate for financial assurance purposes should be based on an independent third party performing all the required post-closure O&M tasks, or assumption of management by DTSC in the event that the facility owner/operator is unable or unwilling to do so. The labor rates used should reflect what DTSC or a third party consultant/contractor would pay to perform the work rather than in-house costs for the current owner/operator. For example, DTSC's contract estimation rate for a licensed engineer is \$201/hr. and a senior engineer is \$237/hr. Labor rates for consulting firms contracting with DTSC are similar.
4. The cost estimate should include detailed major repair/replacement costs for remedy features such as monitoring wells, fence as well as the existing cap. In the interim, costs for removal of the stockpiled soils and regrading of the cap area should be included.

5. The cost estimate should include costs for site inspection, maintenance and repair following extreme natural events such as earthquakes (that have significant effects in Hollister) and major storms (greater than 25-year, 24-hour rainfall design event).
6. The cost estimate should include detailed costs for preparation of permit renewal applications and associated fees.
7. The cost estimate should include costs for preparation and submittal of all required reports.
8. To facilitate proper cost estimating, the report should include a detailed presentation of the existing Class I facility features such actual length and type of perimeter fence, actual cap component profile and square footage and field sampling and laboratory tests for all constituents of concern (COC) in the required five-year COCs sampling/monitoring program.